

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73213 A1

(51) International Patent Classification⁷: C02F 1/32

(21) International Application Number: PCT/CA00/00617

(22) International Filing Date: 26 May 2000 (26.05.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/136,766 28 May 1999 (28.05.1999) US

(71) Applicant (for all designated States except US): TROJAN TECHNOLOGIES INC. [CA/CA]; 3020 Gore Road, London, Ontario N5V 4T7 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DALL'ARMI, Vivian [CA/CA]; 175 Deveron Crescent, London, Ontario N5Z 4J7 (CA). FANG, Gang [CA/CA]; 10 Pinemore Crescent, North York, Ontario M3A 1W6 (CA). LAWRYSHYN, Yuri [CA/CA]; 79 Blackburn Crescent,

R.R. #3, Komoka, Ontario N6A 1N5 (CA). LEM, Joseph [CA/CA]; 2-242 Hyman Street, London, Ontario N6A 1N5 (CA). PENHALE, Douglas [CA/CA]; 38 Seaforth Court, London, Ontario N5V 3L1 (CA).

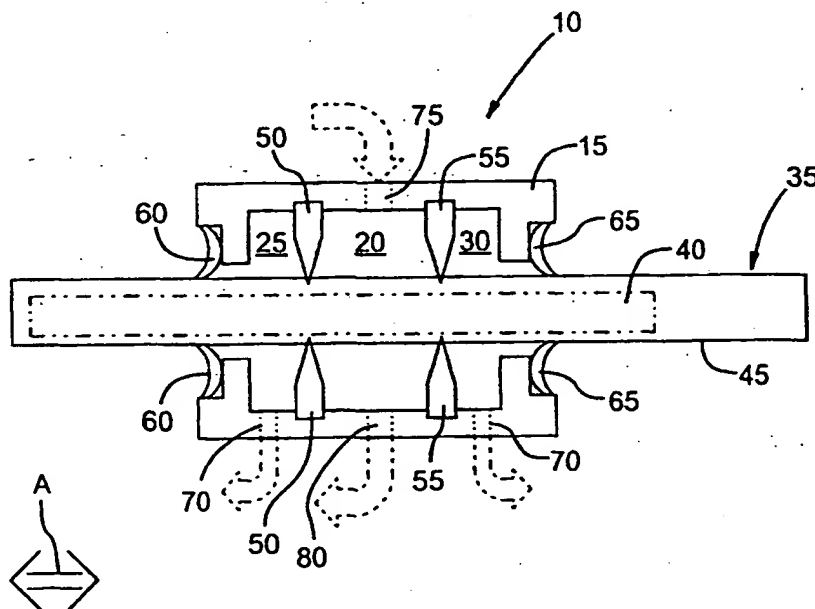
(74) Agents: NASSIF, Omar, A. et al.; Gowling Lafleur Henderson LLP, Suite 4900, Commerce Court West, Toronto, Ontario M5L 1J3 (CA).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: FLUID TREATMENT SYSTEM AND CLEANING APPARATUS THEREFOR



(57) Abstract: A cleaning apparatus (10) for a radiation source assembly (35) in a fluid treatment system is described. The cleaning apparatus comprises cleaning chamber (20) and a second chamber (25, 30) independent of the cleaning chamber which defines a fluid (typically water) buffer layer to obviate or mitigate cleaning fluid from the cleaning chamber leaking into the fluid being treated. The fluid treatment system is particularly useful for us in clean water applications in which ultraviolet radiation is used to treat the water while having the advantages of in situ cleaning of the radiation source when it becomes fouled.